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UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF OHIO
EASTERN DIVISION

OHIO ENVIRONMENTAL COUNCIL,) Case No. 2:21-cv-4380

Plaintiff,

vs.

U.S. FOREST SERVICE, RANDY MOORE in his official capacity as Chief of the United States Forest Service; CARRIE GILBERT in her official capacity as Forest Supervisor for the Wayne National Forest; TIM SLONE in his official capacity as District Ranger for the Ironton Ranger District of the Wayne National Forest.

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

Defendants.

INTRODUCTION

1. This action challenges the “Sunny Oaks” Project (the Project) Final Decision Notice and Finding of No Significant Impact (DN-FONSI) signed by Ironton District Ranger Tim Slone on November 19, 2020, and the Project’s associated final decision documents, including the Environmental Assessment (EA) which was made available to the public for comment during the period spanning December 13, 2018 to February 14, 2019. Plaintiff Ohio Environmental Council (OEC) brings this case under the Administrative Procedure Act (APA), 5 U.S.C. §§ 701 et seq.; the

1 National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 et seq.; and the National Forest
2 Management Act (NFMA), 16 U.S.C. §§ 1600 et seq.

3 **A. Summary of this Action**

4 1. The Sunny Oaks Project will result in adverse outcomes that are precisely the
5 opposite of two of the Project's four stated purposes — oak forest regeneration and maintenance and
6 insect and disease response. The Project will significantly and permanently reduce the amount and
7 relative proportion of oak trees in the areas it targets. This will adversely affect wildlife, human
8 enjoyment, and the future economic value of the forest. Furthermore, the Project will have
9 significant adverse effects on the ability of the forest to resist harmful insects and disease.

10 2. Defendants fail to take the required hard look at the Project's impacts; fail to
11 adequately disclose critical Project information to the public; fail to consider a reasonable range of
12 feasible project alternatives; fail to prepare an EIS where one is required; fail to make the required
13 silvicultural determinations; and, violate federal law and regulation, the applicable Forest Plan, and
14 Forest Service directives.

15 3. Defendants' approval of the Sunny Oaks Project, as well as Defendants' underlying
16 EA and Finding of No Significant Impact, and any timber sale contracts arising under this Project,
17 should be set aside. Further, any new Project activities should be enjoined until Forest Service
18 prepares a legally adequate EIS.

19 **B. Context of the Sunny Oaks Project**

20 4. The Sunny Oaks Project is located in the largely forested landscape of southeast
21 Ohio. The project area includes approximately 25,000 acres of National Forest System lands of the
22 Ironton Ranger District of the Wayne National Forest and approximately 25,000 acres of private
23 land. The Project is located in parts of Jackson (Jefferson and Madison Townships), Gallia
24

1 (Greenfield and Perry Townships), and Lawrence (Aid, Elizabeth, Decatur, Symmes, and
2 Washington Townships) Counties, Ohio.

3 5. The Sunny Oaks Project authorizes timber harvest on about 2,485 acres of the Wayne
4 National Forest. The Project authorizes clearcut timber harvests on all 2,485 acres selected by the
5 Project for harvesting.

6 6. Updated Alternative 2, which is the selected project alternative, authorizes 712 acres
7 of “clearcut,” 1,408 acres of “shelterwood,” and 365 acres of “two-aged” timber harvests. The
8 Project authorizes the 1,408 acres of shelterwood treatments to be implemented as “clearcut with
9 reserves.” The Project also states that the 365 acres of “two-aged” timber harvest are “clearcut with
10 reserves.”

11 7. Even-aged management encompasses timber harvesting techniques which involve
12 cutting all or almost all of the trees in the same stand at the same time. This results in the creation of
13 stands in which trees of essentially the same age grow together. Clearcut and shelterwood harvesting
14 are even-aged techniques. “Two-aged” harvesting techniques are a form of clearcutting.

15 8. NFMA imposes a default maximum size limit of 40 acres for even-age timber
16 harvests in this region of the country. This size limit may be exceeded with appropriate public
17 comment and Regional Office review and approval. 11 of the Project’s proposed timber harvests
18 exceed this default 40-acre maximum. For example, one of the Project’s harvest units is a 116-acre
19 “clearcut with reserves” harvest. These 11 harvests and several others in the project also exceed the
20 Wayne’s 2006 Forest Plan guideline, G-FSM-WLF-1, that openings resulting from even-aged timber
21 harvest should vary in size from 2 to 30 acres to provide habitat for a variety of early successional
22 species. The Wayne sought Regional Office approval for the Project’s NFMA maximum harvest size
23 exceedances.

1 9. The Sunny Oaks Project has a stated 20-year timeframe. In addition to timber harvest,
2 it authorizes approximately 60 acres of log landings, approximately 180 acres of skid roads,
3 approximately 10 miles of new road construction, approximately 17 miles of existing road
4 reconstruction, approximately 41 miles of fire line construction per year (23 miles of which are
5 bulldozer line), the application of prescribed fire at 2,000 to 4,000 acres per year across the project
6 area, and an unspecified amount of “mechanical and/or herbicide mid-story control” across the
7 project area.

8 9. The Project’s stated Purpose and Need is to: “1. Create young, brushy forest that is
10 lacking in the area, 2. Regenerate oak forest in areas where it is favored so that forest type is
11 maintained across the landscape, 3. Respond to insect and disease threats, and 4. Contribute to the
12 local economy through commercial timber harvests.”

13 **C. Timeline of the Sunny Oaks Project**

14 11. The Wayne was assigned a federal FY 2018 timber target (14,607 ccf) that was more
15 than 422% of the Forest’s preceding 21-year average of annual timber targets (FYs 1997- 2017).

16 12. Forest Service issued the initial proposal for the Sunny Oaks Project for Scoping on
17 April 1, 2018. The Scoping request for comments included the stated purposes of the project, the
18 proposed action, and maps. The OEC timely filed Scoping comments.

19 13. Forest Service issued a completed Environmental Assessment (EA) for public
20 comment on December 13, 2018. The EA consisted primarily of a series of 11 PowerPoint video
21 presentations. The comment period for the EA ran through February 14, 2019. The OEC timely filed
22 comments on the EA.

23 14. Forest Service issued a Draft Decision Notice and Finding of No Significant Impact
24 (DDN-FONSI) in January 2020. Notice of the DDN and FONSI was published in the Ironton
25

1 Tribune on January 19, 2020. The deadline to submit objections to the Project was March 4, 2020.
2 The OEC timely filed an objection to the project.

3 15. On November 16, 2020 Defendant Carrie Gilbert issued written responses to the
4 OEC's objection. The Forest Service's responses did not satisfy or resolve Plaintiff's concerns with
5 the Project.

6 16. The Final DN-FONSI was signed by Defendant Tim Slone on November 19, 2020.

7 17. On March 4, 2021, Forest Service issued a statement that it would conduct prescribed
8 fire on approximately 655 acres of the Wayne pursuant to the Sunny Oaks Project. The statement
9 indicated a burn window of March 4 through May 31, 2021.

10 18. Forest Service issued an advanced notice of timber sale letter for the "Peniel Railroad
11 sale" dated July 8, 2021. Defendants authorized the Peniel Railroad timber sale pursuant to the
12 Sunny Oaks Project EA and DN-FONSI.

13 19. Forest Service issued a Peniel Railroad sale timber sale bid letter dated July 27, 2021.
14 The letter states an approximate timber harvest area of 251 acres and an August 25, 2:00pm bid
15 opening.

16 19. **JURISDICTION AND VENUE**

20 20. Jurisdiction is proper in this Court pursuant to 28 U.S.C. §§ 1331 (federal question),
21 2201 (injunctive relief), 2202 (declaratory relief), and 28 U.S.C. § 1346 (United States as a
22 defendant). This cause of action arises under the laws of the United States, including the
23 Administrative Procedure Act (APA), 5 U.S.C. §§ 701 et seq.; the National Forest Management Act
24 (NFMA), 16 U.S.C. §1600 et seq.; and the National Environmental Policy Act (NEPA), 42 U.S.C.
25 §§ 4321 et seq.

26 21. Venue is proper in this Court pursuant to 28 U.S.C. § 1391(e)(1)(B), because (1) a
27 substantial part of the events or omissions giving rise to each of Plaintiff's claims occurred in this
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1 judicial district, (2) a substantial part of property that is the subject of this action is situated in this
2 judicial district, and (3) the Forest Service has offices in this district, and Plaintiff Ohio
3 Environmental Council has offices and members in this district. Assignment to the Eastern Division
4 at Columbus is appropriate because a substantial part of property that is the subject of the action is
5 situated in Gallia County.

6
7 22. An actual, justiciable controversy exists between Plaintiff and Defendants, and the
8 requested relief is therefore proper under 28 U.S.C. §§ 2201-02 and 5 U.S.C. §§ 701-06.

9 **PLAINTIFF**

10 23. Plaintiff OHIO ENVIRONMENTAL COUNCIL (OEC) is a non-profit environmental
11 organization whose mission is to secure healthy air, land, and water for all who call Ohio home. The
12 OEC has over 100 environmental and conservation member organizations and thousands of
13 individual members throughout the state of Ohio. The OEC has a long history of working to protect
14 the ecological integrity, and recreational and aesthetic qualities of the Wayne National Forest. Many
15 of OEC's members have visited these public lands in the Wayne National Forest's Ironton Unit for
16 recreational, scientific, educational, and other pursuits and intend to continue to do so in the future.
17 OEC brings this action on its own behalf and on behalf of its adversely affected members.

18
19 24. The OEC has individual members who live or own property in or near the Wayne
20 National Forest's Ironton Unit and the project area; regularly visit this area, including the areas
21 specified in the Peniel Railroad timber sale, and areas near or downstream of these areas and the
22 Ironton Unit. These members intend to continue to use and enjoy these areas in the near future and
23 beyond. They use and enjoy these areas for a variety of purposes, including scientific study,
24 education, hiking, camping, photography, sightseeing, wildlife observation, botanical observation,
25 and fishing, and intend to continue to do so on an ongoing basis in the future. Plaintiffs' members
26 derive recreational, spiritual, professional, aesthetic, educational, and other benefits and enjoyment
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1 from these activities. The logging, roadbuilding, and prescribed fire and herbicide applications
2 authorized in the Sunny Oaks Project will directly and irreparably injure these interests.
3

4 25. Plaintiff and its members have an interest in participating in the management of the
5 Wayne National Forest through participation in the development of land-use and resource
6 management plans and timber, habitat, and recreational decisions for the forest, and in the
7 preparation of comprehensive environmental analyses required under NEPA and NFMA. Plaintiff
8 participated in Forest Service's decision by commenting on the Project's Scoping and the
9 Environmental Assessment for the decision, and by filing a formal objection to the Project.
10

11 26. Plaintiff and its members have been and are suffering, and will continue to suffer,
12 irreparable injury as a result of the Forest Service's decision to authorize the Sunny Oaks Project and
13 its failure to comply with NEPA and NFMA. For example, new timbering will result in noise, visual
14 blight, increased traffic, loss of natural soil function, habitat fragmentation and degradation, the
15 proliferation of harmful non-native invasive species, and greater air and water pollution. Public and
16 member health and safety effects stemming from the Project include the reduction of forest soil
17 rainwater infiltration (caused by logging and prescribed fire), which adds to existing flood hazard
18 potential in the Symmes Creek watershed; increased logging truck traffic in the area, the use of
19 herbicides across the project area, and smoke exposure from the Project's prescribed fires. All of
20 these harms will diminish Plaintiffs' members' ability to enjoy recreational, spiritual, professional,
21 aesthetic, educational, and other activities in and around the Wayne National Forest.
22

23 27. The Plaintiff organization monitors the use of forest ecosystems and compliance with
24 the laws respecting these ecosystems, educates its members and the public concerning management
25 of these ecosystems, and advocates for policies and practices that conserve the natural value of these
26 ecosystems. Plaintiff cannot achieve these organizational purposes fully without adequate
27 information and public participation in the processes required by law. Defendants' failure to comply
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with NEPA has deprived Plaintiff and its members of information to which they are entitled under NEPA, including information pertaining to the effects of logging on environmental resources in the Wayne National Forest, reasonable alternatives to the proposed action, and available measures to mitigate adverse environmental impacts. This lack of required public information has injured Plaintiff and its members by depriving them of a meaningful opportunity to comment on the missing information; and denying them the procedural safeguards required by NEPA to ensure that the Forest Service carefully considers the direct, indirect, and cumulative effects of its proposed actions, environmentally superior alternatives to those actions, and appropriate mitigation measures. The interests and organizational purposes of the Plaintiff and the interests of its members are directly and irreparably injured by Defendants' violations of the laws as described in this complaint.

28. Plaintiff participates actively in the administrative processes established for management of the Wayne National Forest and did so for the Sunny Oaks Project. Plaintiff submitted comments on Scoping and the Environmental Assessment for the Project. Plaintiff also filed an objection to the Draft Decision Notice, pursuant to Forest Service regulations. Plaintiff has exhausted administrative remedies for the decision challenged in this complaint. Plaintiff seeks declaratory and injunctive relief preventing the Forest Service from proceeding with unlawful actions that cause harm to the environment, and thereby to their members, pending compliance with the law. Because Plaintiff seeks to ensure informed decision-making, compliance with federal law, and the prevention of unacceptable harm to the Project area and the native species that occupy it from logging, Plaintiff's injuries will be redressed by the relief sought.

29 The Plaintiff has no adequate remedy at law to address the injuries to its interests.

DEFENDANTS

30. The full name of Defendant U.S. FOREST SERVICE is United States Department of Agriculture, Forest Service. It is an agency of the Department of Agriculture entrusted with the

1 administration of the national forests, including the Wayne National Forest. Its stated mission is to
2 sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs
3 of present and future generations. The Forest Service authorized the Sunny Oaks Project.
4

5 31. Defendant RANDY MOORE is sued in his official capacity as Chief of the U.S.
6 Forest Service.
7

8 32. Defendant CARRIE GILBERT is sued in her official capacity as Forest Supervisor
9 for the Wayne National Forest. Supervisor Gilbert signed the written response to Plaintiff's objection
10 to the Draft Decision Notice for the Sunny Oaks Project.
11

12 33. Defendant TIM SLOWE is sued in his official capacity as District Ranger for the
13 Ironton Ranger District of the Wayne National Forest. Ranger Slove was the Responsible Official
14 for the Sunny Oaks Project and signed the Final Decision Notice and Finding of No Significant
15 Impact (DN-FONSI).
16

FACTUAL BACKGROUND

D. The Wayne National Forest

17 34. The Wayne National Forest is Ohio's only national forest, beloved for its lush and
18 rugged landscape, many headwater streams, and craggy rock outcroppings. Located in the foothills
19 of the Appalachian Mountains in southeast Ohio, the Wayne National Forest is one of the few public
20 forests in the state — only approximately 15 percent of Ohio's forests are publicly owned. Within
21 only a few hours driving distance of Columbus, Cleveland, and Cincinnati, the Wayne National
22 Forest provides numerous recreational opportunities to Ohio residents and out-of-state visitors.
23 Thousands of people visit the Wayne National Forest each year for hiking, camping, canoeing,
24 wildlife viewing, bird watching, and mushroom gathering, among many other activities.
25

26 35. The Wayne National Forest is divided into three non-contiguous units — Athens,
27 Ironton, and Marietta — totaling more than 244,000 acres of federal land spanning twelve Ohio
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1 counties. Its Congressional proclamation boundary contains approximately 875,000 acres of private
2 and federal land. The Ironton Unit is the Wayne National Forest's western and southernmost unit,
3 consisting of approximately 107,090 acres of federal surface.

4 36. The Ironton Ranger District offers a variety of recreational activities to its visitors,
5 including hiking and horse trails, multiple lakes, camping opportunities, and nature viewing.

6 37. Hundreds of wildlife and plant species are found in the Wayne National Forest,
7 including approximately 90 species of fish, 59 amphibian and reptile species, 50 species of
8 mammals, 158 bird species, and 2,000 species of trees and plants. Rare and sensitive species such as
9 bobcat, black bear, beaver, river otter, Cerulean warbler, Indiana bat, Northern long-eared bat, and
10 tri-colored bat inhabit the Wayne National Forest.

11 38. While the Wayne National Forest is now a peaceful and beautiful refuge for both
12 humans and wildlife, it was not always so. Established in 1934 under the Weeks Act, the Wayne
13 National Forest was created to restore lands and watersheds devastated by many decades of logging
14 and mining.

15 39. Industrial exploitation of southeast Ohio's coal, iron, clay, and timber resources in the
16 19th and early 20th centuries denuded and disfigured the land and left a legacy of environmental
17 damage from which the Wayne National Forest is still recovering. Large-scale clearcut logging and
18 associated land disturbance would reverse years of progress already made in reclaiming natural areas
19 for the public's enjoyment and would undermine these areas' ecological health and resiliency.

20 **E. Why Oak Forests Are Important**

21 40. Oaks support more forms of life than any other tree genus in North America.

22 41. Oak acorns are the primary food energy source in the forest ecosystems of eastern
23 North America during the fall, winter, and early spring. Oak acorns contain large amounts of
24 carbohydrates, fats, and protein, as well as calcium, phosphorus, potassium, and niacin. Acorns are

1 the primary food source for many mammals and birds during the fall and the dormant season of
2 temperate deciduous forests. Acorn availability can affect the weight, condition, reproductive rates,
3 and the size and quality of white-tailed deer antlers. American black bear rates of birth, survival, and
4 seasonal movements vary with the abundance and distribution of acorn crops. Acorns are the
5 primary food of wild turkey during the winter and spring. Acorn production is the minimum limiting
6 factor for ruffed grouse population growth in Ohio. Variation in acorn production also influences
7 population levels and distributions of a variety of small mammals and birds, including mice,
8 squirrels, jays, and woodpeckers.

10 42. Oaks' unmatched ability to host large numbers and diversity of caterpillars make
11 them crucially important for forest songbird populations. The nestlings of most forest songbirds
12 depend on caterpillars and insects for growth and survival. Oaks in eastern North America support
13 more than 500 species of moths and butterflies and their caterpillars, which is far more than any
14 other plant genera. By comparison, the tulip tree, which competes with oaks for dominance, supports
15 only 29 species of caterpillar. Birds have been found to be more abundant and diverse in oak-
16 dominated stands than in stands dominated by competing tree species. Conversion of oak forests to
17 maple and tulip tree forests would have a severe impact on bird communities in the Eastern United
18 States.

21 43. Oaks provide superior habitat stability and quality due to their long lifespans and
22 resistance to decay. Oaks are long lived, resistant to rot, and grow to large sizes. Once established,
23 oak forests are relatively stable plant communities. Once they achieve canopy dominance, oaks
24 likely will persist for decades to centuries as they readily withstand insect outbreaks, lightning
25 strikes, wind events, and ice storms. When damage does occur, the ability to compartmentalize rot
26 helps ensure their continued survival. Injury sites may become cavities which, in turn, become dens
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1 for wildlife. Dens are especially valuable as wildlife habitat when they occur in large trees. Large,
2 hollow oaks are the preferred denning sites of Appalachian black bear.

3 44. The leaf litter of oaks provides important habitat, nutrient-cycling, and biochemical
4 qualities not provided by the leaf litter of competing species.
5

6 45. Oak forest soils have been found to store more carbon than the soils of competing
7 forest types.

8 46. The oak species most commonly found in the Wayne's Ironton Unit include northern
9 red oak (*Quercus rubra*), black oak (*Quercus velutina*), scarlet oak (*Quercus coccinea*), chestnut oak
10 (*Quercus prinus*), and American white oak (*Quercus alba*).

11 47. Of the oak species native to Ohio, American white oak (*Quercus alba*) is deserving of
12 special mention. Even among the native oaks, *Quercus alba* is a singularly important species. It has
13 been praised by nature writers as an outstanding tree among all trees. The potential lifespan of
14 *Quercus alba* runs longer than any other oaks native to the region, and longer than nearly all other
15 native hardwoods. It can produce abundant crops of acorns well into its sixth century of life. Its rot
16 resistance and tendency to form long-lasting wildlife cavities are likely unsurpassed. Its unique,
17 flakey and plate-like bark serves as excellent habitat for many species, including the federally
18 endangered Indiana bat. And, its acorns are less bitter than those of the red oak family, making white
19 oak acorns the preferred food source for many wildlife species. For example, *Quercus alba* acorns,
20 specifically, are the single most important factor in black bear population dynamics and fall
21 movement patterns in the Appalachians. The ability of mother bears to lactate and the fitness and
22 survival of black bear cubs are tied closely to *Quercus alba* acorn masturing (cropping) patterns. The
23 American black bear is currently one of three Ohio state endangered mammal species, and is listed
24 in Ohio's State Wildlife Action Plan as a Mammal Species of Greatest Conservation Need (SGCN).
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1 48. The cerulean warbler is one of North America's most imperiled migrant songbirds
2 and has experienced steep and ongoing population declines over the past several decades. This
3 species holds the number one ranking in the Ohio State Wildlife Action Plan's conservation status
4 rankings for avian species of greatest conservation need. Cerulean warblers have a strong preference
5 for nesting and rearing their young in large white oak trees.
6

7 49. Oak wood is among the most valued in the marketplace. And of the oaks, white oak
8 tends to be the most economically valuable. American white oak (*Quercus alba*), in particular, is
9 virtually the only tree species used to produce the bourbon barrels that age bourbon. It has been said
10 that 100% of a bourbon's color and 60% of its flavor comes from the oak barrel.
11

12 50. White oak bourbon barrel stave mills and cooperages are an important and growing
13 part of the economy at the local and regional levels surrounding the Sunny Oaks project area. At
14 least two major bourbon barrel cooperages are located in Jackson County, Ohio. Part of the Sunny
15 Oaks project area is located in southern Jackson County.
16

17 51. Declines in the amount of oak composition on the forested landscape have significant
18 negative impacts on wildlife populations, human enjoyment, and the current and future economic
19 value of forest stands. This holds especially true for declines in white oak composition.
20

**F. Oak Forests Dominated Eastern North America Prior to European Settlement;
Clearcutting Drove their Decline**

21 52. Estimates indicate 95% of Ohio was forested before European settlement. Today,
22 about 30% of the state is forested. Nearly all forestland in Ohio and the eastern United States was
23 clearcut logged during the "Clearcut Era" of the 19th and early 20th Centuries. The deforestation was
24 so severe that both white-tailed deer and wild turkey — ubiquitous inhabitants of the state today —
25 were declared extirpated from Ohio in 1904. The American black bear was extirpated from the state
26 in the mid-to-late 19th Century and is a state-listed endangered species today. The clearing of
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1 America's eastern forests drove other species to extinction, including the spectacularly colored
2 Carolina parakeet (an Ohio-native parrot) and the passenger pigeon (once the most numerous bird on
3 the planet).

4 53. For Ohio and eastern North America, forest species composition, structure, aesthetics,
5 and ecological maturity have all suffered greatly as a result of post-European-settlement
6 exploitation. Many of the oak tree species common to the state have lifespans in the range of 200-
7 400 years, with members of the American white oak (*Quercus alba*) capable of living beyond 600
8 years. Large, old trees possess unmatched aesthetic and wildlife habit value, yet they are largely
9 missing from today's landscape. The vast majority of Ohio's forests today are less than 100 years of
10 age and still recovering from the devastation of the Clearcut Era and subsequent logging. Ohio's
11 ecologically young forests still have a long recovery ahead of them.

12 54. The industrial machinery used in commercial logging can clear a forest stand in a
13 matter of hours, days, or weeks. Young, brushy habitat then begins developing almost immediately.
14 By contrast, it can take centuries for the forests of eastern North America to grow and develop into
15 their fullest ecological complexity and aesthetic potential.

16 55. The extensive land clearing that occurred during the Clearcut Era *ca.* 1850-1920
17 drove the decline in oak ecosystems across much of eastern North America and Ohio.

18 56. Prior to European settlement, oak was the dominant genus in the forests throughout
19 much of what is now the eastern United States, with much of Ohio included. Records indicate that
20 the percentage of oaks in pre-European settlement eastern North America has dropped from 55% to
21 25% today. Public Land Survey records for southeast Ohio demonstrate that approximately 50% of
22 the trees in the region were oaks prior to European settlement. The presettlement oak composition of
23 Gallia and Lawrence Counties was even higher, with 59.4% and 57% oak composition, respectively.

1 By contrast, today the forests of the southeast Ohio region are 22.3% oak. Gallia County is now at a
2 much reduced 21.1% oak. And the forests of Lawrence County are 36.5% oak.

3 57. Among the oaks, American white oak (*Quercus alba*) historically reigned supreme.
4 White oak was once the dominant tree species of much of eastern North America. Its reign included
5 southeast Ohio, where this single species accounted for an astounding 40% of presettlement Public
6 Land Survey witness trees. By the early 1990s, white oak accounted for only about 14.5% of canopy
7 trees in the region.

8 58. White oak's slide continues today, and the species is the most commercially
9 overexploited tree in Ohio. Unsustainable logging is diminishing its already greatly reduced place in
10 the landscape. American white oak logging removals in Ohio exceed annual net growth at a growth-
11 to-removal ratio of 0.7:1. This species is being logged out of many forests far faster than it can grow
12 back.

13 **G. Multiple Factors Influence the Decline of Oak Today; Clearcutting Is a Primary Factor**

14 59. In the eastern United States, many oak forests appear to be threatened with gradual
15 replacement by competing forest types. Even though oaks are often capable of persisting in the forest
16 canopy or "overstory" for hundreds of years, they will eventually lose their dominant positions if
17 new generations of oak seedlings and saplings do not replace them at some point in the future. Over
18 many decades or centuries, the oak trees currently in a forest overstory will fall out due to mortality
19 or natural disturbance (assuming timber harvest does not first remove them). Gradual conversion of
20 existing oak-dominated canopies occurs when competing tree species found in the forest floor or
21 "understory" succeed at growing up and into the spaces left by fallen oaks. This oak replacement
22 phenomenon tends to occur when forest understories are dominated by seedlings and saplings of
23 non-oak species.

1 60. In the oak forest stands of southeast Ohio, oak seedlings and saplings are often
2 lacking in the understory. Small oak seedlings can be relatively rare, and competitive (large) oak
3 saplings can be very rare.

4 61. The lack of oak dominance in forest understories and the gradual decline and
5 replacement of oak ecosystems has been attributed to multiple interacting factors. These factors
6 include modern-day fire suppression (the use of fire by indigenous peoples and unsuppressed
7 wildfires originating from lightning strikes may have favored oaks in the past), increased rainfall
8 (many oaks tend to have competitive advantages in drier conditions), and increased shade in forest
9 understories (the reproduction of some competing species fare better and persist longer than many
10 oak seedlings and saplings in shady understories).

11 62. The apparent shifts away from oak dominance in many locations due to understory
12 species composition trends is concerning. However, these ecosystem shifts —whether currently real
13 or merely forecasted — are gradual. In the absence of commercial logging, natural shifts away from
14 oak dominance take decades to centuries to unfold.

15 63. On the other hand, and under most circumstances, clearcutting and other forms of
16 even-age logging rapidly and dramatically convert oak forests into stands dominated by less
17 ecologically and economically valuable competing species. After most clearcuts or even-aged cuts of
18 oak-dominated stands, competing species like red maple (*Acer rubrum*), tulip tree (*Liriodendron*
19 *tulipifera*) (also commonly referred to as “yellow poplar” or “tulip poplar”), and ecologically
20 harmful non-native invasive species (NNIS) come to dominate.

21 64. Clearcutting is a major driver of oak ecosystem loss. Clearcutting under all but the
22 most optimal of conditions consistently and dramatically accelerates the decline of oak ecosystems.

23 65. Although all oak species tend to decline sharply after clearcut harvests, American
24 white oak tends to be hit especially hard. The unique characteristics and survival strategies of white

1 oak — slow rate of growth, shade tolerance, poor stump sprouting ability at maturity, and
2 exceptionally long lifespan — make it a poor competitor in even-age harvest regimes and large
3 forest openings.

4

H. Mycorrhizal Networks Are Foundational Factors in Oak Regeneration Success and
Forest Health and Resiliency

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66. Intact forest soils have highly developed mycorrhizal structure that is vitally
7 important for oak regeneration and forest resiliency, including insect and disease response.

8

67. A mycorrhiza is a mutual symbiotic relationship between a fungus and a plant. The
9 word “mycorrhiza” comes from the Greek for fungi (*mykes*) and roots (*rhiza*).

10

68. Mycorrhizal fungi are species of fungi that form mycorrhizal relationships with
11 plants, including trees. More than 90 percent of all plant species the world over depend on
12 mycorrhizal fungi. In fact, it is believed that fungal associations with plant life pre-dated the
13 evolution of roots and facilitated the establishment of complex plant life on land.

14

69. Mycorrhizal fungi dramatically enhance their host plant’s ability to take up nutrients,
15 including water, nitrogen, and minerals like phosphorus. This often helps the host plant survive
16 adverse conditions. In exchange, the fungal symbiont is provided with a portion of the carbohydrate
17 energy (sugars) the plant host generates through photosynthesis. Plants invest their photosynthate
18 carbon in mycorrhizas because the small and profuse strands (hyphae) of mycorrhizal fungi have 60
19 times more absorptive area than fine roots.

20

70. Mycorrhizal fungi increase the volume of water that the soil can absorb, reducing the
21 quantity of nutrients leached out of the soil by rainfall by as much as fifty percent. They boost the
22 ability of plants to fight off attacks by insect pests by stimulating the production of defensive
23 chemicals. The diverse capacities amongst mycorrhizal species for mobilizing nutrients from soil
24 mineral and organic matter insure a host tree against environmental stresses. At the ecosystem level,
25

1 mycorrhizal fungi are not only important for nutrient cycling, but high mycorrhizal fungal species
2 diversity can facilitate resistance to disease and drought, increased rates of tree growth, mineral
3 access, and soil carbon storage.

4 71. Mycorrhizal fungi not only support and boost individual plant hosts, they also often
5 connect plants (including trees) to one another in what are called “mycorrhizal networks.”
6
7 Mycorrhizal networks (MNs) have been dubbed the “Wood Wide Web” and play a foundational role
8 in forest ecology. MNs are what make forests more than mere collections of trees. Forests with
9 strong MNs are communities of interconnected and interrelating trees — trees that can share both
10 resources and information.

11 72. MNs influence the survival, growth, physiology, competitive ability, and behavior of
12 the plants linked in the network. MNs enable networked trees to share nutrients, carbon, water,
13 electrical signals, and biochemical information. Plant behavioral responses to information sent
14 through MNs have been observed to include rapid changes in mycorrhizal colonization, root growth,
15 shoot growth, photosynthetic rate, foliar nutrition, foliar defense chemistry, and defense response to
16 pest pressures.

17 73. Networked trees can send chemical warning signals to other trees in their MNs when
18 they come under attack by insect pests. This allows trees connected in the MN to get a head-start on
19 increasing defense chemicals in their leaves and other sensitive tissues. And, networked trees that are
20 under stress can benefit from inter-tree nutrient and resource sharing facilitated by MNs.

21 74. Large, old trees tend to serve as especially important network “hubs” in MNs, as they
22 have been found to have more numerous and robust mycorrhizal connections than younger, smaller
23 trees. The presence of large trees can influence the ambient temperature and moisture of local
24 environments, modify local soil conditions, and sustain rich assemblages of mycorrhizal fungi
25 species that provide a diverse inoculum source to regenerating tree seedlings.

1 75. The presence of robust MNs is important for seedling establishment and growth.
2 When seedlings become linked into a MN with veteran trees, they gain access to photosynthate
3 carbon, hydraulically lifted water, and patchily distributed nutrients that might otherwise be limiting
4 resources.
5

6 **I. Clearcutting Destroys the Mycorrhizal Networks of Oaks and Facilitates Invasion by
7 Competing Mycorrhizal Networks that Suppress Oak Seedlings**

8 76. MN generally fall under two separate categories: those made up of ectomycorrhizal
9 (EcM) fungi and those made up of arbuscular (AM) fungi. These two classes of MN have some
10 fundamental differences and appear to compete with one another. Notably, oaks and (often co-
11 occurring) hickories are served by EcM networks, whereas the primary competitors of oaks —
12 maples and tulip trees — are served by AM networks.
13

14 77. At least one study has shown that AM networks suppress EcM-affiliated tree
15 seedlings (e.g., oaks) and that EcM networks suppress AM-affiliated tree seedlings (e.g., maples and
16 tulips). In other words, it appears that oak forests are locked in competition against maple-tulip
17 forests below ground just as they are above ground.
18

19 78. EcM networks are especially sensitive to intensive commercial logging. Research has
20 shown that EcM fungi decline significantly due to clearcut logging. In contrast, AM populations
21 increase in extensively logged areas. This is likely due to AM's common symbioses with
22 successional plant cover.
23

24 79. Even-age timber harvesting with industrial machinery results in widespread and
25 severe soil compaction. Logging induced soil compaction profoundly affects EcM fungi abundance,
26 structure, and function; it therefore raises concerns regarding forest productivity, juvenile tree
27 regeneration, and long-term ecosystem functioning. The disruption and diminishment of EcM
28 networks due to harvest-induced soil compaction has been shown to be substantial and long-lasting,
29

1 and recovery of a soil from severe compaction may take centuries rather than decades. Data shows
2 that clearcut harvesting is especially destructive of EcM fungal networks. A meta-analysis of
3 harvesting impacts on ectomycorrhizal fungi found that it generally takes 90 years for
4 ectomycorrhizal species richness in heavily harvested forests to approach that found in undisturbed
5 forests.
6

7 80. The removal of mature EcM trees, the compaction of forest soils, and the
8 corresponding disruption of EcM networks likely facilitates AM invasion and succession from oak-
9 hickory to maple-tulip ecosystems.
10

J. Oak Regeneration Through Timber Harvesting Is Complicated and Difficult

11 81. There are thousands of papers published on the problems associated with regenerating
12 oaks. Despite decades of research, experimentation, and tools development, successful oak
13 regeneration through commercial timber harvest remains difficult throughout much of the eastern
14 United States. Achieving desirable regeneration outcomes can be difficult, unpredictable, and
15 expensive.
16

17 82. Put briefly, the oak regeneration problem occurs when the probability of replacing an
18 existing oak stand with a new one by a final timber harvest or other stand-replacing disturbance is
19 zero or unacceptably low for the stated management objective. In other words, the timber harvest is
20 poorly timed with the oak regeneration process. Even-aged oak forests pass through a regeneration
21 process that often spans 20 or more years. First, acorns must be produced and a sufficient number
22 must survive to germinate and establish new oak seedlings. These seedlings must survive long
23 enough to develop root systems and stems that can compete successfully for dominant positions once
24 a new forest is initiated by a timber harvest. If the harvest occurs before oak seedlings are
25 established or they are able to build large root systems, then it is highly unlikely that a new oak
26 forest will form.
27
28

1 83. Though oak regeneration silviculture is fraught with difficulties and uncertainties, one
 2 thing is clear: *sufficient numbers of large oak seedlings and saplings are required to sustain oak*
 3 *stocking into the future.* Sufficient numbers and spatial distribution of competitive (large) oak
 4 seedlings must be present prior to substantial overstory removal in order for oak regeneration to
 5 succeed. This principle has been well known by professional foresters for several decades. The
 6 Wayne's 2006 Forest Plan recites this fundamental principle.

8 84. Poor oak regeneration after a disturbance occurs when the abundance, spatial
 9 distribution, and the size, of oak advance reproduction¹ is insufficient to compete with well-
 10 established sapling and poles of shade-tolerant species (e.g., red maple) or newly established but
 11 fast-growing shade-intolerant species (e.g., tulip poplar). These competitors outnumber, out-grow,
 12 and ultimately shade-kill advance oak reproduction when harvest conditions are less than optimum.

14 85. Because forest regeneration is a process, not an event, it may take 20 –30 years of
 15 waiting and active management to increase oak advance reproduction numbers, distribution, and size
 16 to competitive levels necessary for successful oak regeneration harvest. Few land managers or
 17 landowners plan for oak regeneration this far in advance of harvesting, can afford the time or money
 18 investment to implement oak regeneration treatments, or can sustain the long-term regime of
 19 practices necessary with changes in personnel or landownership.

21 **K. The SILVAH:OAK Decision Support System Demonstrates the Project's Oak Stands
 22 Are At or Near the Beginning of the Oak Regeneration Process and Are Therefore
 23 Nowhere Near Ready for Even-Age Timber Harvest**

25 86. Forest managers and policymakers need information on the likelihood of regeneration
 26 success before implementing regeneration treatments and policies to ensure long-term sustainability
 27 of forest ecosystems.

28 ¹ Advance reproduction is composed of the seedlings and/or saplings present in the understory of a mature forest
 prior to a canopy disturbing or canopy removing event.

1 87. Pre-harvest inventories of reproduction are important because advance reproduction
2 is a primary regeneration source in many forest ecosystems. Inventory-based evaluations have been
3 developed to gauge the potential for advance reproduction to meet regeneration objectives.
4

5 88. SILVAH:OAK is a computer tool for making silvicultural decisions in which current
6 forest stand conditions are identified through a systematic inventory of overstory and understory.
7

8 89. Forest Service used the SILVAH:OAK decision support system to provide baseline
9 inventory data for the Sunny Oaks Project.
10

11 90. The purpose of SILVAH:OAK is to provide guidance to forest managers in the
12 sequence and timing of silvicultural treatments designed to foster the development of small oak
13 regeneration to competitively sized reproduction that can form new oak stands following a timber
14 harvest. Informed by previous studies of harvested stands, SILVAH:OAK uses a pre-harvest
15 inventory of oak advance reproduction to recommend treatments for successful oak regeneration
16 after a final removal harvest.
17

18 91. The SILVAH decision support system uses a strategic inventory to identify the
19 abundance and spatial distribution of various desirable seedlings of known competitive status and
20 the barriers to their success. At the heart of SILVAH are silvicultural guidelines for reducing barriers
21 to regeneration and fostering growth or release of desirable oak seedlings. SILVAH organizes these
22 potential silvicultural interventions and links them to inventoried conditions in the forest overstory
23 and understory at the forest stand level. These interventions may be costly, as they require advance
24 inventory of overstory and understory conditions and careful timing of treatments to stages of oak
25 forest and seedling development.
26

27 92. At the heart of SILVAH:OAK is a series of decisional charts intended to guide
28 managers to silvicultural prescriptions that are appropriate for oak regeneration objectives. There are
six oak charts (F - K).
29

93. Chart I is for stands near the beginning of the oak regeneration process. Chart I prescriptions promote development of existing, new oak seedlings into the larger established oak size class. Some of the Chart I prescriptions include a light thinning cut.

94. The SILVAH data for the Sunny Oaks Project indicate that only a very small minority of the Project's oak objective stands might be ready for Chart I prescriptions.

95. SILVAH's Chart J is for stands at the beginning of the oak regeneration process. Chart J prescriptions are aimed at establishing not-yet-existing new oak seedlings.

96. The SILVAH data for the Project indicate that a substantial majority of the Project's oak objective stands possess inadequate size, numbers, and distribution of oak advance reproduction. These stands are at the beginning of the oak regeneration cycle and fall under Chart J. Chart J does not include any thinning or timber removal prescriptions.

97. The SILVAH:OAK guidelines recommend that at least 50 percent of sample plots within a stand should be “stocked with competitive oaks” for oaks to maintain dominance after a final removal harvest.

98. Per the Sunny Oaks Project's SILVAH data and reports, a substantial majority of the Project's oak objective stands do not satisfy the SILVAH:OAK 50 percent stocking guidelines.

99. Defendants did not disclose, discuss, or analyze the Project's site-specific SILVAH data in Scoping or the EA.

100. Plaintiff OEC acquired the Project's SILVAH data through Freedom of Information Act (FOIA) requests.

L. The Sunny Oaks Project Will Diminish Oak Ecosystems and Forest Health

101. This Project will diminish oak ecosystems and forest pest and disease response — the exact opposite of two of the Project's four stated purposes.

1 102. The Sunny Oaks Project violates the cardinal rule of oak silviculture, that:
2 competitively sized (large) oak reproduction must be present in sufficient numbers and in sufficient
3 spatial distribution in a stand’s understory before the overstory is removed.
4

5 103. Based on the Project’s SILVAH inventories, most of the oak objective stands lack not
6 only large oak advance reproduction, but advance oak reproduction, period. As a result, clearcutting
7 or shelterwood logging these stands will result in the sharp decline of their oak composition. In the
8 future, these stands will likely be dominated by competing species such as red maple, tulip poplar,
9 and NNIS, which have far less wildlife and economic value than oak.
10

11 104. Neither the EA nor the DN-FONSI adequately disclose, explain, or rebut the
12 underlying stand exam and diagnosis data that underpin the Sunny Oaks Project. The very general
13 discussions in the EA and DN-FONSI about the need for oak ecosystem restoration fail to provide a
14 reasonable factual baseline for meaningful NEPA analysis of this project.
15

16 105. The SILVAH exam records themselves show that Defendants failed to take a site-
17 specific NEPA hard look at the Sunny Oaks Project stands — very few of Defendants’ SILVAH
18 stand exams took anywhere near the SILVAH minimum recommended plot data points.
19

20 106. The SILVAH data Defendants did collect shows that, for a substantial majority of the
21 Project’s “oak objective” stands, there are neither enough large oak saplings to support an oak
22 regeneration clearcut nor enough small oak seedlings to support an oak regeneration shelterwood.
23

24 107. According to the SILVAH guidelines, it could take 20 to 30 years of management
25 investments to get the Project’s stands adequately stocked with the large oak reproduction required
26 for successful oak regeneration harvest.
27

28 108. Under the Forest Plan, the EA and DN-FONSI cannot rely on two-age or clearcut
29 with reserves prescriptions to recruit or develop oak seedlings where they are not already sufficiently
30 present and/or not already of sufficient size. The 2006 Plan states that the same adequate numbers of
31

1 healthy and well distributed oak seedlings must exist as was discussed for clearcut harvests prior to
2 applying the two-aged or clearcut with reserves harvest. Nevertheless, the Project prescribes two-age
3 logging for stands that lack adequate oak reproduction numbers and adequate oak reproduction size.
4 This holds true for both the Project's stand-alone two-age prescriptions and the two-age
5 prescriptions it authorizes for all "shelterwood" harvests in Updated Alternative 2.
6

7 109. The Sunny Oak Project concludes that shelterwood harvests are appropriate for
8 establishing new oak reproduction where the number of existing oak reproduction is inadequate for
9 clearcutting. But, this conclusion is contradicted by evidence the agency had before it, including:
10 scientific literature finding that shelterwood treatments tend to fail at establishing new oak seedlings;
11 and, SILVAH guidance and decisional charts that limit shelterwood treatments to situations in which
12 adequate numbers of oak reproduction are already present. Defendants failed to address this
13 contradicting evidence.
14

15 110. Furthermore, the Project's "clearcuts," "clearcuts with reserves," and "two-age"
16 harvests could all be implemented through identical clearcut timbering methods. This is because the
17 2006 Forest Plan requires the retention of trees around streams as "riparian filter strip" buffers. And,
18 Forest Service can account for any or all of a harvest unit's two-age or reserve "retention" trees
19 within these mandatory filter strips. Consequently, there may be no difference whatsoever among the
20 Project's "clearcuts," "clearcuts with reserves," or "two age" harvests when they are implemented.
21 Under all of these methods, every tree not located in a required stream protection buffer could be
22 removed in a single harvest.
23

24 111. Moreover, Updated Alternative 2, the Project's selected alternative, authorizes all of
25 the Project's "shelterwood" harvests to potentially be implemented as "two-age" or "clearcut with
26 reserves" harvests. As a result, and again because of how "reserve" trees can be counted, each and
27
28

1 every timber harvest authorized by this Project — whether clearcut, two-age, or shelterwood —
2 could be implemented in the exact same manner: as a clearcut.

3 112. Neither the EA nor the DN disclose the fact that all of the Project’s timber harvests
4 could be implemented in the same fashion, as clearcuts. Defendants’ failure to disclose this fact
5 serves to confuse the public as to the nature of the Project’s effects.

6 113. Defendants stress that one of the Project purposes is the creation of young, brushy
7 habitat for certain species of wildlife. Plaintiff OEC timely provided Defendants with scientific
8 evidence that the large sizes of the Project’s timber harvests (many of which exceed the Forest Plan
9 guidelines of 2-30 acres and the NFMA default 40-acre maximum harvest size) are contrary to the
10 habitat preferences of animal species the Project states it seeks to benefit. These species include
11 ruffed grouse (a “flag species” for the Project) and American black bear.

12 114. Mycorrhizal networks are essential for forest health and resiliency, including the
13 ability and fitness of trees and forests to regenerate and respond to insect and disease pressures.
14 Defendants expressly declined to consider or evaluate the Project’s negative impacts to mycorrhizal
15 networks and the resulting negative impacts to oak forests, oak forest regeneration, carbon balance,
16 soils, and the forest’s ability to respond to insect and disease pressures.

17 115. The OEC timely proposed a project alternative — retention of all mature oak trees in
18 the stands to be harvested (i.e., leave the oaks and take the rest) — that would better meet the
19 objectives of the Project (including the habitat objective) and that would avoid or mitigate oak
20 composition diminishment, adverse impacts to oaks’ mycorrhizal networks, and adverse impacts to
21 the forest’s ability to resist harmful insects and disease. However, Defendants eliminated the OEC
22 alternative from detailed analysis.

116. In addition, neither a No Action Alternative (considered but eliminated from detailed analysis) nor the chosen alternative (Updated Alternative 2, introduced after the EA) was analyzed in the EA.

117. The two alternatives that were analyzed in the EA and the selected alternative (not in the EA) all restrict the timber sale harvests they contemplate to even-age methods only.

CLAIMS FOR RELIEF

FIRST CLAIM

DEFENDANTS' VIOLATION OF NEPA AND THE APA

118. Plaintiff hereby realleges and incorporates by reference the allegations set forth in the preceding paragraphs.

119. The National Environmental Policy Act and its implementing regulations require federal agencies to take a hard look at the environmental consequences of proposed actions and the reasonable alternatives that would avoid or minimize such impacts or enhance the quality of the human environment. *See* 42 U.S.C. § 4332(2)(C)(i); 40 C.F.R. pt. 1502, 1508.

120. NEPA is “our basic national charter for protection of the environment.” 40 C.F.R. § 1500.1(a). Its twin aims are to facilitate informed agency decision-making and public access to information. By focusing both agency and public attention on the environmental effects of proposed actions, NEPA facilitates informed decision-making by agencies and fosters public participation.

121. To accomplish these objectives, NEPA requires “responsible [federal] officials” to prepare an environmental impact statement (“EIS”) to consider the effects of each “major Federal action[] significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C)(i). To determine whether the impacts of a proposed action are significant enough to warrant preparation of an EIS, the agency may prepare an Environmental Assessment or “EA.”

1 122. An EA must provide sufficient information for determining whether to prepare an EIS
2 or issue a finding of no significant impact. 40 C.F.R. § 1508.9(a). The information presented in the
3 EA must be of “high quality,” and include “accurate scientific analysis.” 40 C.F.R. § 1500.1(b). The
4 EA must take a “hard look” at the impacts and must analyze not only the direct impacts of a
5 proposed action, but also the indirect and cumulative impacts. *Id.* §§ 1508.7, 1508.8. Such analysis
6 must include all reasonably foreseeable impacts of the proposed action.

8 123. If, after preparing an EA, the agency determines an EIS is not required, the agency
9 must provide a “convincing statement of reasons” why the project’s impacts are insignificant and
10 issue a Finding of No Significant Impact or “FONSI.” *Id.* §§ 1501.4, 1508.9, 1508.13.

12 124. NEPA’s implementing regulations require that the agency “shall identify any
13 methodologies used and shall make explicit reference by footnote to the scientific and other sources
14 relied upon for conclusions,” and shall ensure the scientific accuracy and integrity of environmental
15 analysis. *Id.* § 1502.24. The agency must disclose if information is incomplete or unavailable and
16 explain “the relevance of the incomplete or unavailable information to evaluating reasonably
17 foreseeable significant adverse impacts.” *Id.* § 1502.22(b). The agency must also directly and
18 explicitly respond to dissenting scientific opinion. *Id.* § 1502.9(b).

20 125. Federal agencies must prepare an EIS for any federal action that may have a
21 significant environmental effect. 42 U.S.C. § 4332.

22 126. In determining whether a proposed action may “significantly” impact the
23 environment, both the context and the intensity of the action must be considered. 40 C.F.R. §
24 1508.27.

26 127. In evaluating intensity, the agency must consider numerous “significance” factors,
27 including impacts that may be both beneficial and adverse; the degree to which the effects on the
28 quality of the human environment are likely to be highly controversial; the degree to which the

1 possible effects on the human environment are highly uncertain or involve unique or unknown risks;
2 whether the action is related to other actions with individually insignificant but cumulatively
3 significant impacts; the degree to which the action may adversely affect an endangered or threatened
4 species or its critical habitat; and whether the action threatens a violation of Federal, State, or local
5 law or requirements imposed for the protection of the environment. 40 C.F.R. § 1508.27(b).
6

7 128. If the agency's action may be environmentally significant according to any of the
8 factors, the agency must prepare an EIS.

9 **(Violation of NEPA and 5 U.S.C. § 706(2))**

10 129. Defendants violated NEPA and its implementing regulations through issuance of the
11 Sunny Oaks Project EA and DN-FONSI. These violations include, but are not limited to:

12 **A. *Failure to Take the Required NEPA Hard Look at the Project's Effects.***

13 130. Failing to provide the high-quality data and analysis necessary to support its FONSI
14 for the Sunny Oaks Project. This includes, but is not limited to: incomplete data, unsupported
15 conclusions and contradictory findings, inaccurate or unanalyzed baseline conditions for the project
16 area, and the failure to analyze or incorporate the best available science;

17 131. Failing to disclose or adequately analyze key baseline conditions and baseline data in
18 the EA necessary to evaluate the current condition of the forest stands in question, including site-
19 specific oak regeneration data;

20 132. Relying on substantially incomplete and methodologically problematic stand
21 examination data to make site-specific determinations; and, not disclosing or analyzing the
22 limitations of said data or the relevance of said data to evaluating reasonably foreseeable adverse
23 impacts such as oak regeneration failure;

1 133. Offering explanations for its decisions that run counter to the evidence and science
2 before it, including Defendants' explanation that even-aged harvesting the Project's stands will
3 successfully regenerate and maintain oak forests;

4 134. Failing to acknowledge or analyze scientific and methodological information that
5 contradicts its conclusions, including but not limited to the SILVAH:OAK decisional charts and
6 General Technical Report NRS-33;

7 135. Failing to disclose a clear definition of the Project's actions — “clearcut,” “two-age,”
8 “clearcut with reserves,” “shelterwood” — and failing to meaningfully distinguish those actions
9 from one another;

10 136. Failing to analyze a No Action Alternative for the Project;

11 137. Selecting a project alternative (Updated Alternative 2) that was not disclosed or
12 analyzed in the EA;

13 138. Creating and selecting a vague process Defendants label “Adaptive Management”
14 that is not contained in the EA and was not subject to public scrutiny during the NEPA process; that
15 fails to select an action; that fails to clearly identify adjustment triggers; that fails to clearly identify
16 and analyze adjustments to an action, including what components of Timber Stand Improvement
17 (TSI) should apply to what circumstances and when; that fails to adequately disclose and analyze
18 mitigation measures; that fails to disclose the effects of an action and adjustments; and that fails to
19 adequately describe the monitoring that would take place to inform the responsible official whether
20 an action is having its intended effect;

21 139. Failing to analyze its NFMA even-aged harvest optimality and appropriateness
22 determinations based on site-specific factors; or, alternatively, failing to disclose why its said
23 determinations were contrary to the site-specific evidence before it;

1 140. Entirely failing to consider important aspects of the problem or project, including but
2 not limited to: harmful Project impacts to mycorrhizal networks. Defendants' failure to consider
3 harmful impacts to mycorrhizal networks means that Defendants failed to consider resulting negative
4 effects on: oak forest regeneration; forest health and resilience, including disease and insect
5 resistance, and the response of forest stands to climate stressors; soil conditions; and, carbon
6 sequestration and carbon storage.

8 141. These violations of NEPA are arbitrary, capricious, an abuse of discretion, and not in
9 accordance with law under the APA, which has caused or threatens serious prejudice and injury to
10 Plaintiffs' rights and interests.

11 ***B. Failure to Consider an Adequate Range of Project Alternatives.***

13 142. Failing to rigorously explore and objectively evaluate Plaintiff OEC's proposed oak
14 retention project alternative and failing to adequately explain the grounds for dismissing said
15 alternative, including: failing to explain how removing, on average, more than a third of the basal
16 area in the Project's stands would not create young, brushy habitat; failing to evaluate the OEC
17 alternative on a site-specific basis; and, failing to acknowledge or adequately consider the scientific
18 information on understory light regimes, oak regeneration release conditions, and mycorrhizal
19 regeneration factors that Plaintiff OEC provided in support of its alternative;

21 143. Failing to consider a meaningfully broad range of feasible Project alternatives when
22 making its NFMA even-aged harvest optimality and appropriateness determinations;

23 144. Failing to analyze a No Action Alternative for the Project;

25 145. Failing to disclose or analyze the selected project alternative (Updated Alternative 2)
26 in the EA;

1 146. The Forest Service’s failure to consider an adequate range of feasible NEPA
2 alternatives is arbitrary, capricious, an abuse of discretion, and not in accordance with law under the
3 APA, which has caused or threatens serious prejudice and injury to Plaintiffs’ rights and interests.
4

5 ***C. Failure to Prepare an EIS where one is Required.***

6 147. Failing to prepare an EIS prior to authorizing the challenged decision, instead relying
7 upon the issuance of a FONSI, when several of NEPA’s “significance” finding factors exist with
8 respect to the Sunny Oaks Project. This is a major federal project significantly affecting the human
9 environment. The NEPA context factors and, in particular, intensity factors demonstrate the
10 significance of the Project’s effects:

11 148. The project will have numerous adverse effects on forest oak composition, soil
12 mycorrhizal structure and function, forest pest insect and disease response, sensitive wildlife, human
13 enjoyment, public health and safety, and the current and future economic value of the forest;

14 149. The effects are highly controversial because, *inter alia*:

15 a. Decades of agency science, the Forest Plan, and the EA state that sufficient
16 numbers, distribution, and sizes of oak reproduction must be present in a stand’s understory
17 prior to oak regeneration harvest — but the available project baseline data shows that these
18 factors are absent or insufficient in a substantial majority of the Project’s stands;

19 b. The Project contradicts proffered scientific information and analysis regarding
20 the efficacy of clearcutting as an oak forest regeneration method;

21 c. The Project contradicts the scientific information and analysis before it
22 regarding the efficacy of shelterwood cutting as an oak forest regeneration method, including
23 the application of shelterwood cutting when advance oak reproduction is absent;

24 d. The DN-FONSI contradicts the EA when it claims that two-aged and
25 shelterwood prescriptions will be used to make up for lack of oak seedlings;

e. The Project misapplies a methodological system and related set of guidance it materially relies upon to form its analysis: specifically, the SILVAH:OAK system and its corresponding guidance and oak forest prescription decisional charts;

f. Several of the Project's cut areas exceed the default Regional maximum size limit of 40 acres, as well as applicable forest plan cut size guidelines and provided scientific literature findings regarding the preferred harvest opening sizes for wildlife species — including ruffed grouse, a “flag species” of the project;

g. All of the Project's harvests could be implemented through the same method and with the same result — as clearcuts. Yet Defendants did not disclose this. This raises substantial questions about the nature and effects of the Project's harvests;

h. The project authorizes 2,000 to 4,000 acres of prescribed fire per year over the entire 50,000-acre project area. With a Project horizon of 20 years, that could amount to 40,000 to 80,000 acres of prescribed fire over a large area, with little-to-no identification of where and when these fires will occur. This raises substantial questions about the size and effects of the action.

150. The effects are highly uncertain because, *inter alia*:

a. The Project fails to select a specific action for the majority of the Project's acreage: the forest stands labeled "Shelterwood" could be implemented through several different silvicultural prescriptions, including clearcut logging;

b. The Project's use of incomplete and methodologically suspect site-specific stand exam baseline data:

c. Oak acorn crops are sporadic in nature, but figure prominently in what prescriptions are appropriate for many of the Project's stands; and

The available baseline data shows that a substantial majority of the Project's

1 Oak Objective stands are not ready for even-age regeneration harvest; forest stands in this
2 condition often require 20 to 30 years to develop oak advance reproduction adequate for
3 successful oak regeneration harvest.
4

5 151. The Project raises substantial health and safety concerns due to its potential
6 exacerbation of existing flood risks, as well as air pollution from many thousands of acres of
7 authorized prescribed fire.

8 152. The decision sets a precedent for future timber projects on the Wayne National Forest
9 that exceed plan size guidelines, ignore site-specific data, and adopt vague “adaptive management”
10 approaches. Forest Service oak projects like this one set the example for other land managers and
11 private landowners in the immediate area, the region, and the oak forests of eastern North America,
12 generally. Oak ecosystem maintenance and sustainable oak regeneration timber harvest are issues of
13 great ecological and economic importance. Because of the patience, careful data collection and
14 analysis, and expenses required, it is likely up to government agencies like U.S. Forest Service to be
15 the leaders in developing and modeling sustainable oak regeneration timber harvests.
16

17 153. The action is cumulatively significant because it is part of a pattern of past, present,
18 and future human-caused diminishment of oak forest ecosystems on the local, state, and regional
19 landscapes. Even-age harvesting, and especially clearcutting, has greatly eroded the position and
20 abundance of the oak forest ecotype from historical times and that erosion continues today. The
21 Sunny Oaks Project will erode oak ecosystems in the project area and it should be viewed in context
22 as part of the much larger phenomenon of even-age harvesting driving and accelerating oak
23 ecosystem conversion to other ecotypes. In addition, there are many large clearcuts on private forest
24 lands in and around the Project’s analysis area. Sunny Oaks will add to the pattern of large-scale
25 even-age logging impacts that are present and ongoing in the area.
26
27

1 154. The EA states the Sunny Oaks project is likely to adversely affect federally
2 endangered and threatened species, specifically the Indiana bat, and the northern long eared bat.
3

4 155. The action violates NEPA, NFMA, the APA, the implementing regulations of the
5 forgoing statutes, the Wayne National Forest's 2006 Forest Plan, and applicable Forest Service
6 Directives.
7

8 156. The Defendants' failure to prepare an EIS is arbitrary, capricious, an abuse of
9 discretion, and not in accordance with law under the APA, which has caused or threatens serious
10 prejudice and injury to Plaintiffs' rights and interests.
11

SECOND CLAIM

DEFENDANTS' VIOLATION OF NFMA AND THE APA

12 157. Plaintiffs hereby reallege and incorporate by reference the allegations set forth in the
13 preceding paragraphs.
14

15 158. In 1976, Congress enacted the National Forest Management Act (NFMA) 16 U.S.C.
16 §§ 1600 et seq., which governs the Forest Service's management of the National Forests.
17

18 159. NFMA was enacted in response to a nationwide controversy over the U.S. Forest
19 Service's use of clearcutting in the National Forest System. NFMA constrains the Forest Service's
20 use of clearcutting to circumstances in which it is determined to be the "optimum" method of
21 achieving applicable management requirements and goals. 16 U.S.C. § 1604(g)(3)(F)(i). And,
22 NFMA constrains the agency's use of other even-age harvest methods (e.g., shelterwoods) to
23 circumstances in which they are determined to be "appropriate" methods of achieving applicable
24 management requirements and goals. *Id.*
25

26 160. Furthermore, NFMA proscribes timber harvest where soil will be irreversibly
27 damaged; and, limits the use of clearcuts and other forms of even-age cutting to situations where
28

1 they are consistent with the protection of soil and the regeneration of the timber resource. 16 U.S.C.
2 § 1604(g)(3)(E)(i); (F)(v).

3 161. NFMA also mandates that the harvesting system to be used “is not selected primarily
4 because it will give the greatest dollar return or the greatest unit output of timber.” 16 U.S.C. §
5 1604(g)(3)(E)(iv).

6 162. NFMA requires the creation of a resource management plan — called a “Land and
7 Resource Management Plan” (LRMP) or “Forest Plan” — for each unit of the National Forest
8 System.

9 163. NFMA establishes a two-step process for forest planning. It first requires the Forest
10 Service to develop, maintain, and revise a Forest Plan for each national forest. 16 U.S.C. § 1604(a).
11 The Forest Plan guides natural resource management activities forest-wide, setting standards,
12 management goals and objectives, and monitoring and evaluation requirements.

13 164. Once a Forest Plan is in place, site-specific actions are planned and evaluated by the
14 Forest Service. All site-specific decisions must be consistent with the broader Forest Plan. 16 U.S.C.
15 § 1604(i).

16 165. The Wayne National Forest Land and Resource Management Plan (Forest Plan) was
17 adopted in 2006.

18 **(Violation of NFMA and 5 U.S.C. § 706(2))**

19 166. Defendants violate NFMA because the Project is inconsistent with the terms of the
20 2006 Forest Plan. The Wayne’s Forest Plan requires adherence to Forest Service directives during
21 site-specific project analysis: “[g]overnment manuals and handbooks are to be followed during site-
22 specific project analysis.” And, the applicable Forest Service Handbook (FSH), Eastern Region
23 (Region 9) Directive at Supplement No.: R9 RO 2409.17-2008-1 mandates that silvicultural
24 prescriptions and associated NEPA analysis must find that clearcutting “is currently the best option

1 for a specific stand.” However, Defendants fail to make site-specific determinations that clearcutting
2 is currently the best option for the Project’s specific stands; instead, Defendants recite general oak
3 silviculture optimality language found in the 2006 Plan;

4 167. Alternatively, Defendants violate NFMA by making site-specific optimality
5 determinations that are contrary to the evidence before the agency and contrary to the oak
6 silviculture optimality language found in the Forest Plan. Defendants authorize clearcutting for
7 stands that they admit are not currently ready for clearcutting;

8 168. Defendants Violate NFMA because clearcutting is not the optimum silvicultural
9 method for maintaining, restoring, or regenerating the oak stands in the Project; yet, Defendants
10 authorize clearcutting for all stands in the Project;

11 169. Defendants Violate NFMA because the Project’s “Two-Age” determinations
12 prescribe clearcuts for specific stands in which clearcuts are neither optimum nor appropriate for
13 successful oak regeneration;

14 170. Defendants violate NFMA and the 2006 Forest Plan because the Project’s
15 “Shelterwood” determinations authorize all Project shelterwoods to be implemented as clearcuts.
16 These stands therefore require a determination that clearcutting is currently the optimum method for
17 achieving the applicable requirements and goals of the Wayne’s Forest Plan. Defendants fail to make
18 the required NFMA optimality determinations for these stands;

19 171. The Project’s “Shelterwood” appropriateness determinations violate NFMA because
20 oak advanced reproduction is absent, scarce, or poorly distributed in a substantial majority of the
21 Project’s oak objective stands. Implementation of shelterwood treatments under these conditions will
22 likely result in oak regeneration failure;

23 172. The Wayne’s 2006 Forest Plan includes, *inter alia*, Goal 6.1 and Objective 6.1a,
24 which directs the Wayne to promote the maintenance and restoration of the oak-hickory ecosystem

using all available silvicultural treatments. Defendants violate NFMA by failing to analyze their even-age harvest optimality and appropriateness determinations among a reasonably broad range of feasible project alternatives and silvicultural treatments;

173. Defendants violate NFMA by authorizing even-age timber harvests without having reviewed either those harvests' adverse effects on mycorrhizal soils or ways to avoid or mitigate those adverse effects.

174. These violations of NFMA are arbitrary, capricious, an abuse of discretion, and not in accordance with law under the APA, which has caused or threatens serious prejudice and injury to Plaintiffs' rights and interests.

REQUEST FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that this Court:

A. Adjudge and declare that the Defendants' approval of the Sunny Oaks Project violates NEPA, NFMA, those statutes' implementing regulations, and the Wayne's Forest Plan, and is arbitrary, capricious, an abuse of discretion, and contrary to law under the judicial review standards of the APA, 5 U.S.C. § 706(2);

B. Hold unlawful and set aside the Decision Notice, FONSI and EA for the Sunny Oaks Project, and order the Defendants to withdraw the DN, FONSI and EA and any associated contracts until such time as Defendants demonstrate that they have complied with the law;

C. Order Defendants to revise the Sunny Oaks Project so that it meets with the requirements of NFMA and the Wayne's Forest Plan;

D. Order Defendants to prepare an EIS:

E. Enjoin Defendants and their contractors, assigns, and other agents from proceeding with commercial logging prescriptions, sales, or harvesting unless and until the violations of federal law set forth herein have been corrected;

F. Enter such other declaratory relief, and temporary, preliminary, or permanent injunctive relief as may be prayed for hereafter by Plaintiffs;

G. Award Plaintiff its costs of suit, reasonable expenses and attorney fees pursuant to all applicable legal authority including, but not limited to, the Equal Access to Justice Act, 28 U.S.C. § 2412, and any and all other provisions of law or equity; and

H. Grant such further relief as the Court deems just and proper in order to provide Plaintiff with relief and protect the public interest.

DATED: September 9, 2021

Respectfully submitted,



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